

BULLETIN OF
THE NEW YORK ACADEMY
OF MEDICINE



VOL. 47, No. 5

MAY 1971

SYMPOSIUM ON AMEBIASIS

Introduction*

KEVIN M. CAHILL, M.D.

Director

Tropical Disease Center
St. Clare's Hospital and Health Center
New York, N. Y.

Professor of Tropical Medicine
Royal College of Surgeons
Dublin, Ireland

AMEBIASIS holds an interesting position in the constellation of "tropical" diseases in temperate climates. In North America we have experienced some of the greatest water-borne epidemics of invasive amebiasis known to man, most notably the Chicago epidemic in 1933 and the outbreak in South Bend, Ind., in 1956. Numerous stool surveys among random populations have shown an incidence ranging from 1% to more than 10%, the vast majority of subjects being asymptomatic. During the first part of this century the causative parasite, *Entamoeba histolytica*, was regarded by most physicians as universally harmful to man. In recent years the pendulum of opinion as to pathogenicity has swung so far that some consider intestinal cysts of *E. histolytica* to be merely commensal protozoa.

*Presented as part of a *Symposium on Amebiasis* sponsored by The Tropical Disease Center, St. Clare's Hospital, New York, N. Y., and The Merck Company Foundation, Rahway, N. J., held at the Center, September 12, 1970.

Amebiasis is often, usually unfairly, regarded as the *bête noire* of the traveler, and is probably the most often misdiagnosed ailment of American tourists. Recognition of the etiologic organism requires appropriate laboratory techniques and—equally important—an adequately trained parasitology technician; both are frequently wanting in general hospitals. However, one has to work as a clinician for only a brief period in any of the developing lands to appreciate what great problems amebic dysentery and intestinal amebiasis are, and one has to observe but a few patients devastated by amebiasis to recognize its full potency. It will be noted later in this symposium that amebiasis is the most common cause of admission to some hospitals in Africa, and the most common cause of death. Tragically—since the correct diagnosis can almost always be made *if* an awareness of the possibility exists, and treatment is almost always fully effective *if* it is provided early enough—deaths also still occur in New York City from amebiasis.

It is obviously crucial to define amebiasis. What are the criteria for labeling one protozoon, *E. histolytica*, as pathogenic and relieving another of this opprobrium? Are there different strains of *E. histolytica*? What does the organism do in the human body? Can we correlate *in vitro* experiments with our clinical experience? None of these questions is easy to answer and yet a start must be made. As with previous symposia on clinical tropical medicine published in the *Bulletin of the New York Academy of Medicine*, our attempt has been to provide a comprehensive view of an important clinical topic.

We begin with the epidemiology of amebiasis around the world, as viewed by Dr. Ronald Elsdon-Dew, director of the Amebiasis Research Institute in Durban, South Africa, and by Dr. Kerrison Juniper, Jr., of Arkansas, in the United States. Dr. R. A. Neal's studies on the organism itself provide the link between the epidemiologic studies and offer a basis for our consideration of the clinical picture. Few physicians have had the opportunity of working at a hospital that admits 5,000 cases of proved amebiasis per year. This vast experience with clinical patterns of and therapeutic approaches to clinical amebiasis is summarized by Dr. S. John Powell. The difficulties of diagnosing amebiasis, especially in smaller hospitals where experienced parasitological technicians are rare, is considered by the head of the Protozoology Section at our National Center for Communicable Diseases in Atlanta, Ga. Dr. Healy's emphasis on classic parasitologic techniques provides

an introduction to the newest and crucial phase in our understanding of "invasive" as opposed to "commensal" amebiasis. During the last 10 years various laboratory techniques have been employed to detect the presence of circulating antibody against *E. histolytica*. These have proved valuable as seroepidemiologic tools and as aids to the clinician who deals with extraintestinal amebiasis and, to a lesser degree, with intestinal infection.

In summary, this is another in a series of symposia the goal of which is to provide the clinician in the developed world with improved knowledge of the "tropical" diseases that are appearing in ever increasing numbers in this country as Americans travel, as soldiers return, and as the good physician's diagnostic index of suspicion rises.